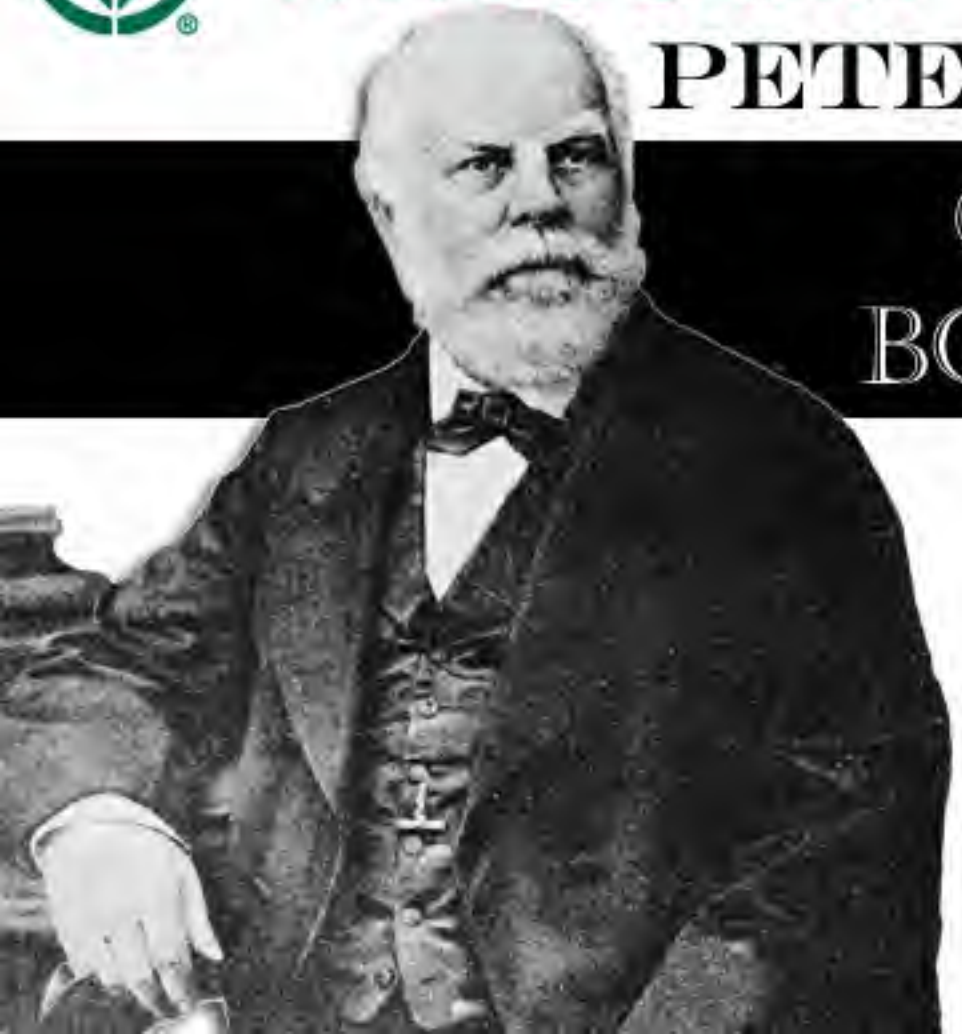
Missouri Botanical Garden
Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

see Weddell
VCh 21

Cereus Jamacaru Salm Grieve's Garden
Aug 25 1859.

flower horizontal, curved upwards, oblique

plant faint fragrance

flowers, night blooming, white, tube and sepals
reddish brown and reddish green.

fl. 10 inches long; ovary 1¼ lines long 7 lines thick
with 8–9 triangular scales

1920

lower part of tube 3 inches long, cylindric, almost naked, or with 1 or 2 scales; then widening 2 or 3 inches longer; sepals here in 3/8 arrangement about 20–25 linear oblong, obtuse fleshy, somewhat concave; the inner most green outer reddish brown

petals white shorter than the interior sepals 21; outer ones respexte, ciliate, inner ones shorter broader, 8 lines broad, obtuse, aristate dentate, laciniate ciliate

lower part of tube naked 18 lines, then being pale yellowish green filaments for 3/4 inches, curved upwards no corona

Style thick, uniform 1/2 line, pale yellowish green; curved 15–16 greenish yellow stigmata thin somewhat subulate, erect-spreading; 10 lines long.

Whole length of style & stigs 8/4 inch.

Pollen grains spherical, large, 0.036–0.038 lin diameter; scattered by small transparent globules, probably oil drops

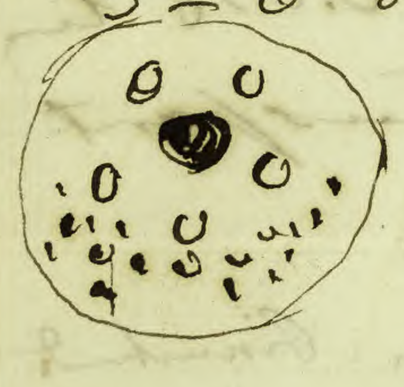
Ovula 0.3 or 0.28 lines long, on branched funiculi, fringed on the inside towards the micropyle.

over

Second flower 2 days later, similar
about 25 sepals and 25 petals; sepals
spreading and recurved, petals erect
spreading, forming a cupshaped corolla
about 4 inches diameter, style and
stamens declined, exterior stamens
forming a straight corona — but not
separated from the others at their
insertion; stigmata as long as pistils,
15 — Between 9 & 10 p.m. the flower was nearly fully
open, but anthers already empty. At 6 a.m.
flower still half open.

flower opened 27th August in the evening, open all night,
but stamens effect about 10 o'clock p.m. with 30th in the morning a
line of separation of flower from ovary was observed,
which increased till in the evening of same day the flower
fell off, leaving ovary or young fruit with long style.

Areolae polymorphic — 4 lines in diameter,
12–14 l. distant — spines on old areolae
12–16 on its lower part, unequal, 1/2–1 inch long,
3–6 on the upper part, irregular, central one
longest, at length deflexed, often 2–3 inches long
others shorter — long.



Stem. on the flowering portion of branches
dark — 5 winged ribs, nearly 2 inches broad
and 3/4 inch thick

H. B. Wien July 22 1869

Cereus Jamacaru, subsp. peruvianus; Nightflowering

Ovary 2 mm tuberculate 22 mm long
nectarian cavity 33
Staminate part of tube 85
petals 70
flower length. 210 mm = 9 inches

sepals of ovary very small transverse fimbriate
scales with naked axils, 12 in number
lower part of tube for about 8 cent. with
only 13 small scales,
upper part with 25 green, fleshy, with
red tip and margins,
about 21 petals, white.
filaments greenish yellow
style same —
stigmas 20 mm long filiform pale
yellowish
sepals in 6/16 arrangement.
6 angled

Plant 6 feet high, & flower scarcely two
feet from the ground from very old parts, that have
con last their spines, and green colour!
Some tomentum at base of flower

Cereus Benselerii Baumann in Hort bot Audebon is similar to speciosissimus and said to come a hybrid between Cer Speciosissimus as mother and Cer Fendleri as male parent.

Cereus Poselgerianus is here nearly 2 feet high, apparently same as C. papillosus

Opuntia monacantha 10 feet high, very robust, lower terete part of trunk with large bunches of light brown tomentum and 15-25 spines!

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GEORGE ENGELMANN PAPERS

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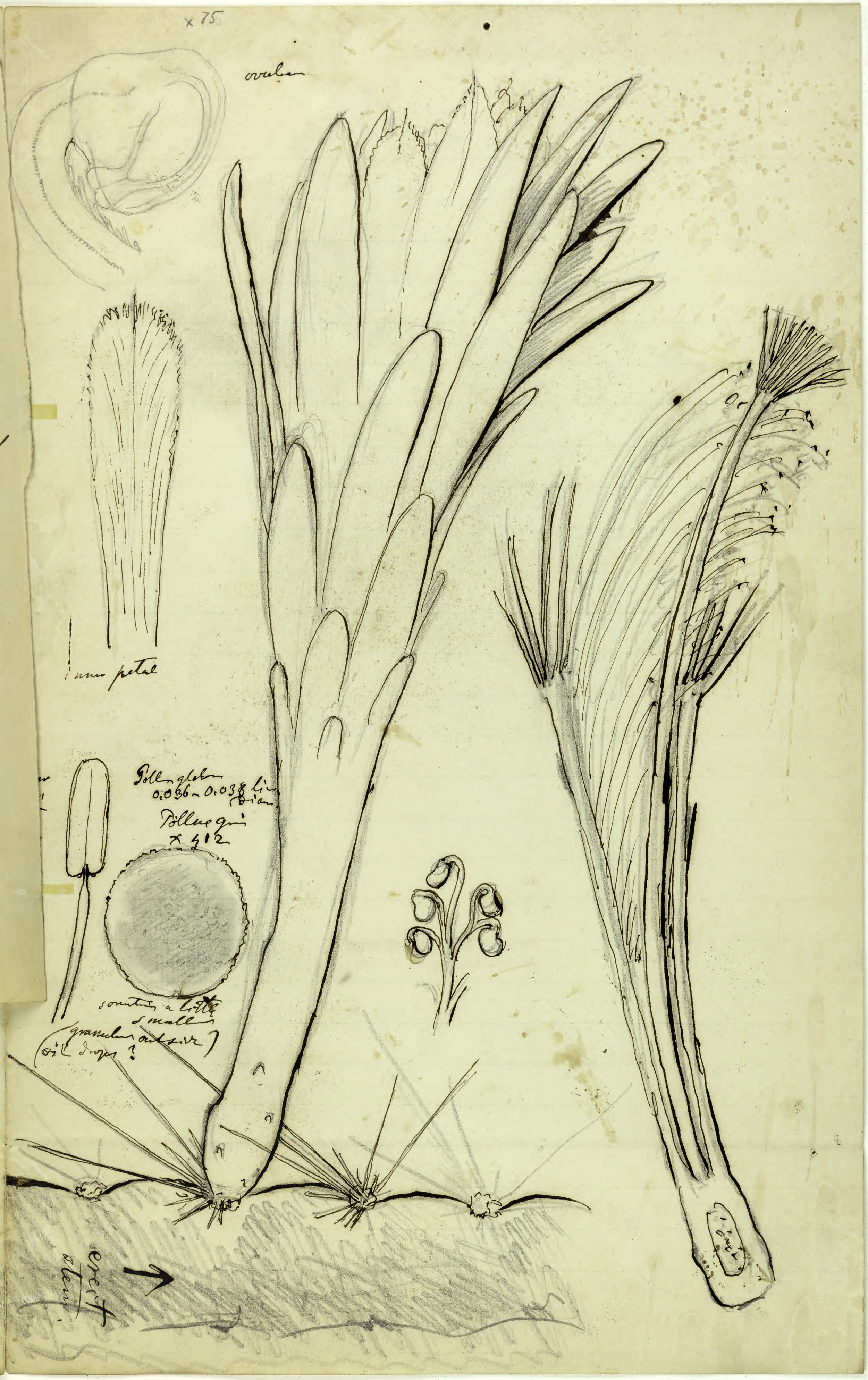

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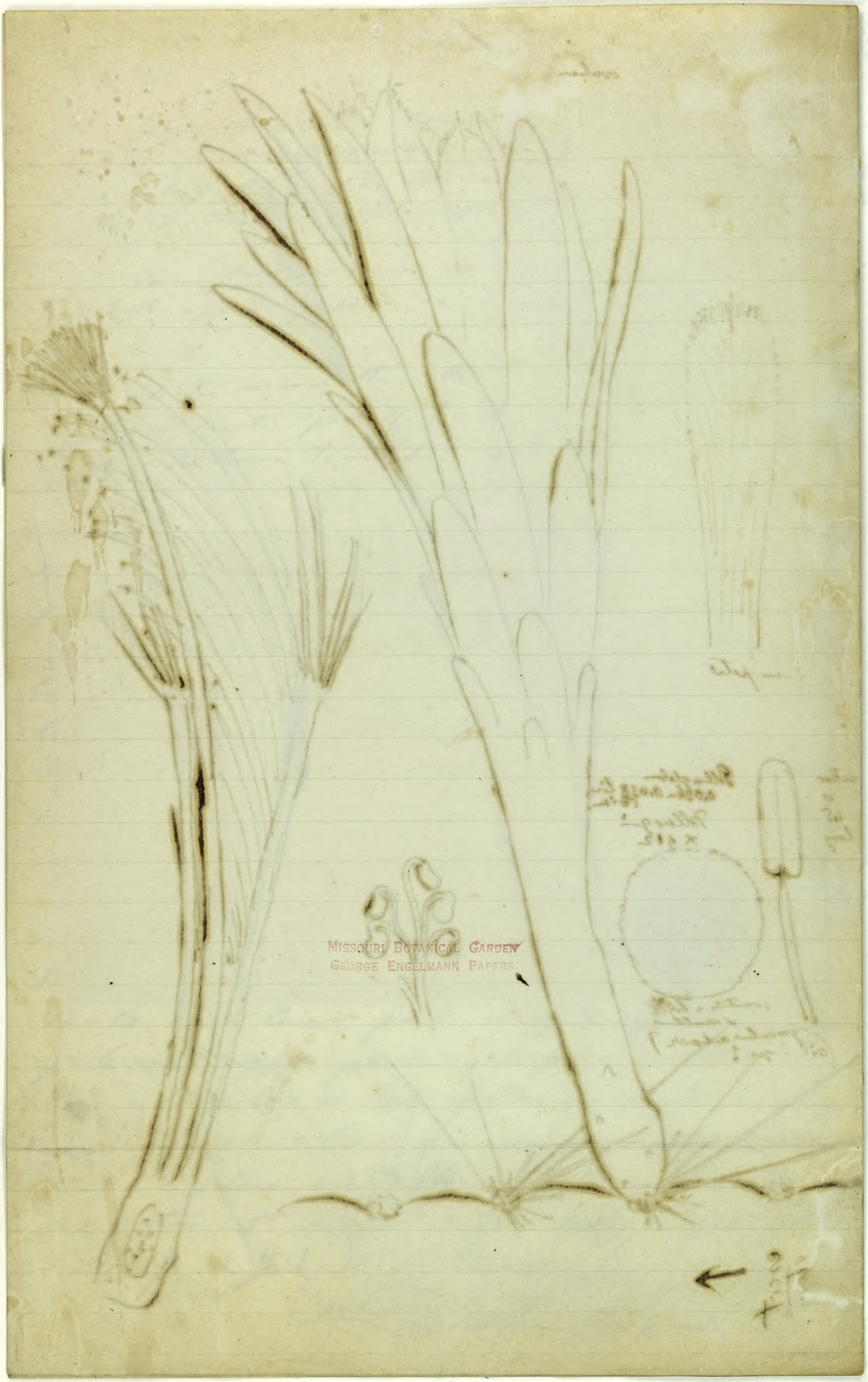

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Fl. at Mr Mathews', St Louis,
July 9th 1861

Cereus "chalybeous"

Flower opening July 9th after 4 p.m., closing at daylight next morning. Springing from one of the upper areolae of last year's growth.

Fl. 8 inches long; 4 inches in diameter; exterior calyx leaves or sepals recurved, spreading, exterior petals slightly x, inner ones erect, forming a cup, much like those of C. grandiflorus

Ovary oval, somewhat angular with about ~~4~~ 13 very small sepaloid scales scarcely half a line long, with a sharp black mucro and a little wool in the axils.

tube about 3" long, widening upwards with ~~the~~ 13 similar sepals or scales, only larger; 28–30 interior sepals, purplish brown, mucronate, the inner most ones acuminate, assistate recurved.

Petals about 25–28 white, exterior ones, with a brownish purple tinge externally; shorter than

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sepals, spatulate long acuminate.

Ovarian cavity 10 l. long elongated oblong

Naked space of tube 3/12 lin long somewhat arched over by the base of the lowest filaments

The next 3/12 inches of tube bear very numerous filaments, a naked space 10 or 12 inches wide follows then in the upper and widened part of the tube, and then a corona of exterior stamens, about 1/12 inch long follows

Style bears about 15 filiform acute stigmata, of pale yellowish white colour; at first united into one clubshape mass, afterwards slightly spreading, about 7 lines long

Anthers 2/12 lines long 1/4 as wide, oblong linear,

Pollen globose grains, very slightly granular $\frac{16}{412} = 0.039$ lin diameter

Ovules very numerous, long very much branched funiculi, oblong oblique, 1/4 line long.

& thinner

Plant 2 inches diameter, acutish upwards, 1 foot high — Dark bluish green

Ribs 9 thick, rounded, somewhat ~~prominent~~, the pulvilli ~~of~~ the younger part of the plant especially very prominent grooves sharp at first shallow afterwards.

Areolae 3/4 inch distant young ones with short bluish or greyish tomentum.

Spines on young areolae 1–3 central and 8–10 radial ones, on older ones 15–25 (very old ones) spines, 8–10 upper and inferior stouter and longer, 1/2–1 inch long, stiff needle like, black, 10–15 exterior and

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inferior ones radiating, paler, shorter, 3–4 l. long. –

This is named C. Chelybaeus, H. Bor but seems to belong rather to C. caesiosecans Salm, on account of the larger number of ribs ~~and of Spring~~ but the figure of Pfeiff II. t. 24 of C. caesiosecans shows 8–10 spreading greenish stigmata. — Both perhaps not different?

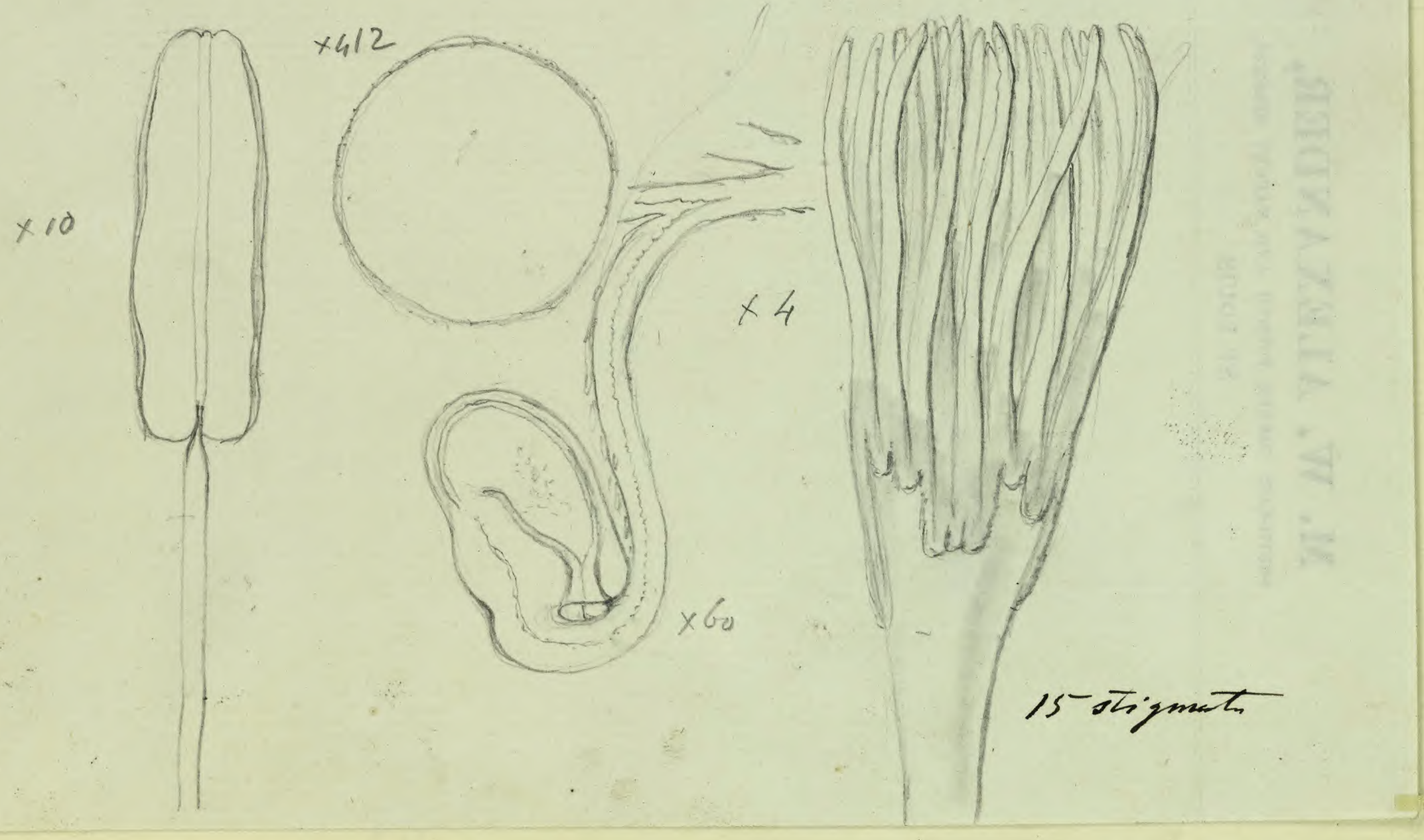
6 Notes – Hort Wien. Jan 1858

~~Opuntia senica = Op. macrorhiza~~

Cereus chelybaeus white, nightflowering –

Cereus chelybaeus July 10 1861

Hort Matthews



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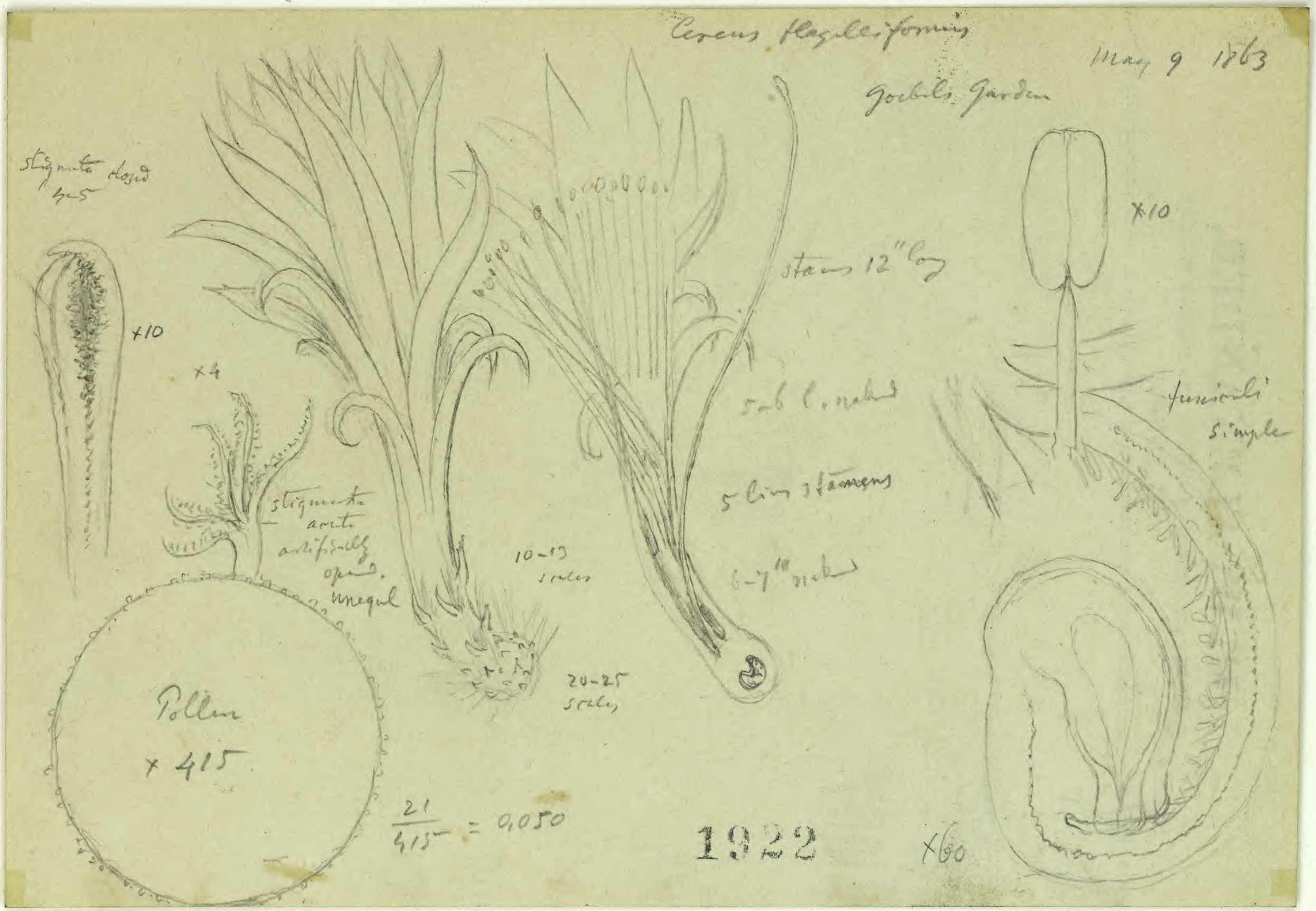
Cereus flagelliformis

May 9 1863

Goebel's garden



$\frac{21}{415} = 0.050$

1922

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M. W. ALEXANDER,

SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,

ST. LOUIS.

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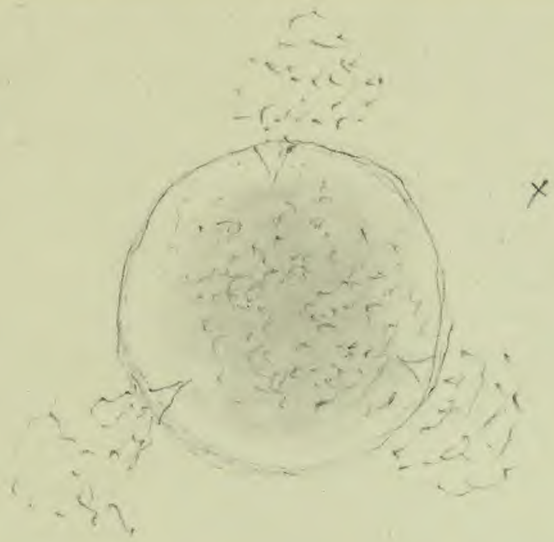
Cereus Tweedii

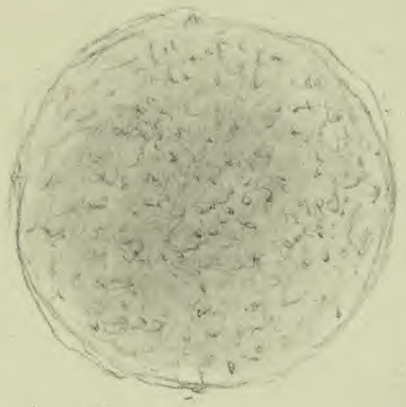
21 Sept 1860

Hort. Bot. Mirror



x 412

Pollen under some pressure



Pollen
0.028 – 0.030

x 10

Pollen palered anthers, deep velvety purple when wet beautiful carmine, and tinging waters; 1 line long

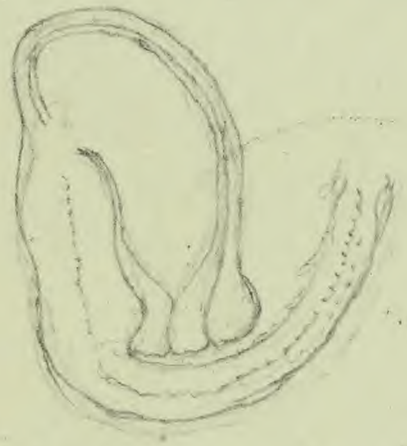
x 412

cells of knotted with stellate markings

cavity full of nectar!

x 2

x 60



Pericarp neck bracted with ~~[illegible]~~ fibres

lower part of tube, 3 lines naked, yellow, full of sweet liquid, glutinous

stamens attached to tube, 3 lines slanting

naked space glabrous long, then a corona of short (4 lines) stamens

7 subpetaloous stigmata, yellowish

1923

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Cerus Baumanni

×60

Hb Mus

Sept 3 1862

×10

8 stigm

1924

HUNT INSTITUTE
FOR BOTANICAL DOCUMENTATION
Carnegie Mellon University
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ARTHUR LEITCH,

APOTHECARY AND CHEMIST,

Sixth and Market streets, St. Louis, Mo.

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(Cer. Baumannii H. Paris.)

1925

Cereus Tweedii Hook

in Hort Kew. Aug 1857

About 3 feet high 1¼–1½ inch in diameter; flowers on the upper part of the stem lateral, crimson red scarcely inclining to orange; 2 inches long, curved, tubular

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ovary globose, covered with 30–40 red fleshy subulate scales which bear a sparse white wool in the axills. – tube of the flower long curved, covered with the same kind of sepals, which all ~~with the~~ but the upper most only bear wool or hair in the axills; tube grooved longitudinally grooves 13; sepals with hair in the axills on the tube about 40 upper sepals crowded near the top

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of the tube also about 30, gradually changing into petals which are scarcely different from the interior vertically of about 13 petals, only a little broader the the sepals — erect, short, not expanded into a limb at all.

Lowest part of tube, about 4 lines, naked, and almost arched over with the connate base of stamens; the corona is small space, about 2 or 3 lines from which the long stamens arise — which ~~forcon~~ or bracteole fasciculate on the upper side (the arch) of the corolla. The naked space above them is long. Then comes almost at the end of the tube a circle of short stamens 2 lines long only — anthers oblong and purple; pistil within the tube; stigmata 7 exserted.

Similar to Wendrills plate No. 30 from Bolivia.

Similar plants are Cer. Colubrinus & Cer. Serpentinus. Cer. Thigosus & Cimensis are shorter & thicker

Notes on Cactaceae Amos June 1857
made at Dr Muhlenpfordt's.

Cer. Baumanni Muhlenpf. is the older name
of a plant which Hooker has lately figured
and published as C. Tweedii

1926

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Muhlenpfordt

Notes on Cactaceae

Hermosillo 1847

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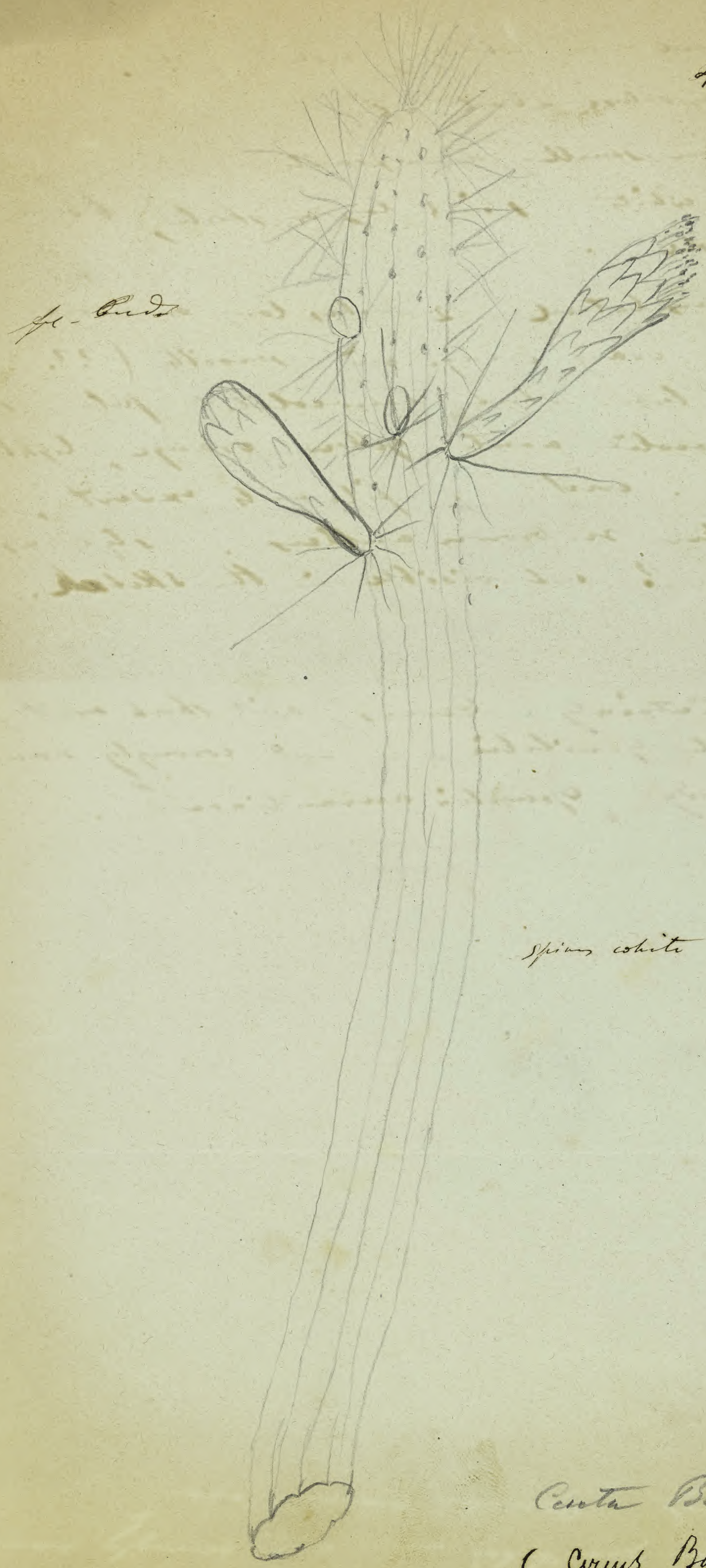
Wedells south American Cactaceae

No 29

1927



Cereus Bolivia

(Cereus Baumannii)

Salta Corrs 1857

29

Cinti, Bolivia.

Stem end or twining, reclinate ? ?
angles obtuse about 8
~~O~~ovoid small approximate
spines white 1 inch long or shorter, 6 or 8 in each fascicle ?

flowers lateral 2 inches long or more, oblique; ovary orange red smooth (??) scales of tube short, lanceolate, petals similar short lanceolate acute yellow-orange, lighter than tube; exert; filaments exserted, yellow, with darker red brown anthers. style as long as anthers ? not visible in the sketch. —

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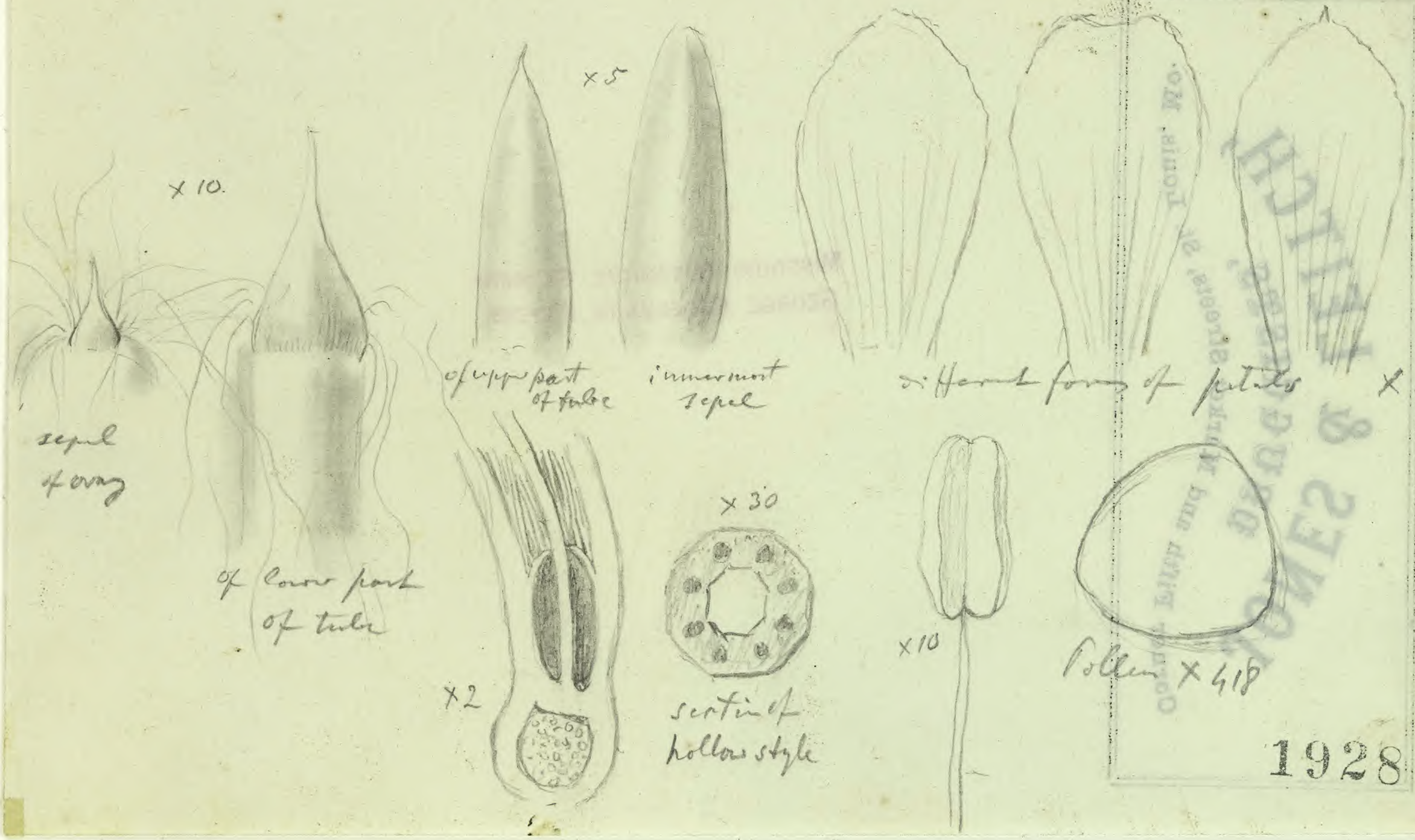
Certainly a Cereus, with short erect petals and exert genitalia — and wrongly named by somebody "Opuntia aurantiaca"

Cereus Baumannii H. B. Nelson Sept 3 1862



1928

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JONES & LEITCH,

DRUGGISTS,

Corner Fifth and Market Streets, St. Louis, Mo.

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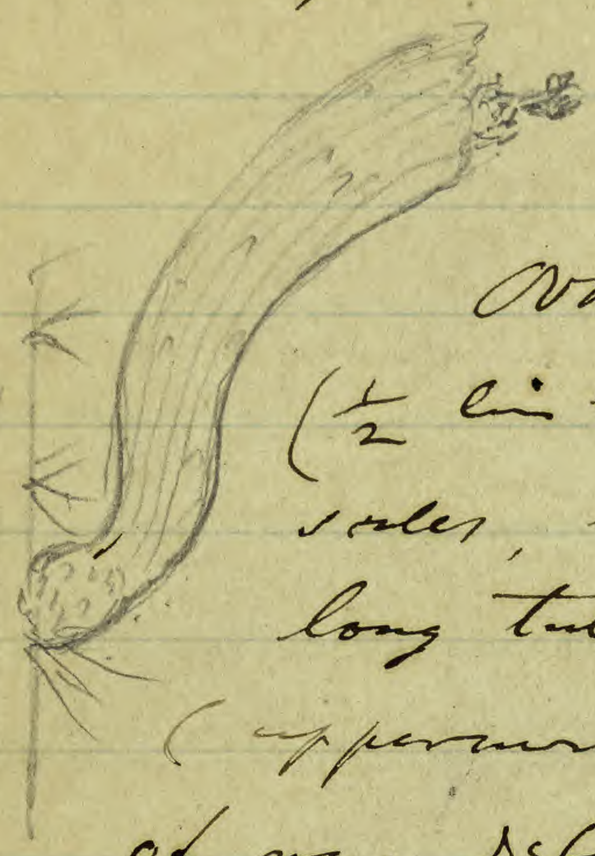
Sept 5th 1862

Hort Paris – Salm p. 214 1929

Cereus Baumannii or Fouceadii Hort Bot Missouri

abundantly blooming

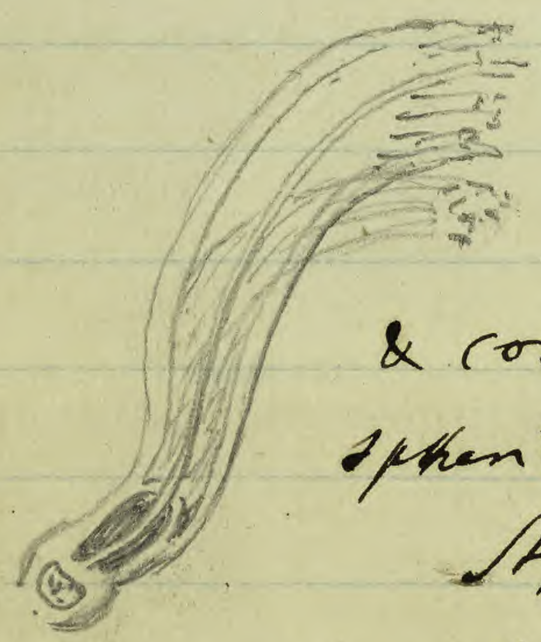


Flowers crimson – scarlet, 2½ inches long, with a double curvature, & oblique rim

Ovary globose with about 30 very small (½ lin long) ovate acuminate or bristle pointed red scales, bearing long wool in axil; scales of long tube not so close, 50–60 in number 1–3 lines long (apparent longest) their pulvilli forming a number of very distinct ridges on the tube, which thereby appears (15) ribbed; most of these linear lanceolate acute, with wool in axils, upper ones destitute of wool, and top ones linear obtuse

Petals erect 10–12 spatulate, 3–4 lines long, less the half as wide, acutish or even ~~emarginate~~ mucronate, mostly obtuse, even emarginate

Ovary 3 lines diamet. globose, tube above the ovary free for about 4 lines, forming the nectariferous cavity almost closed by a membrane formed by the base of the lowest filaments; tube then staminiferous 5 or 6 lines and free for the remaining 9 or 10 lines, (3 + 4 + 5½ + 9½ = 22 lines) 0 or 5 free + 14 = 26 lines where, at the fauces or insertion of petals a single line of short stamens forms a crown



Filaments & pistil exsert.

anthers about 1 line long oblong, emarginate & cordate at base; pollen 11/418 lin diam. subtriangular spherical;

Style a hollow tube, 8 angular, with 8 greenish, subacute acutish stigmata

Ovules very numerous, on long branching filamentose funiculi; ovules scarcely ¼ line long

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